

WHAT IS CLAIMED:

- 1        1. A method for use in a mobile station, the method comprising the steps of:  
2                attaching to a wireless data network; and  
3                performing asymmetric traffic class negotiation with the wireless data network.
- 1        2. The method of claim 1 wherein the performing step includes the steps of:  
2                transmitting to the wireless data network a quality of service information element  
3                comprising a traffic class indicator that is indicative of requesting asymmetric traffic  
4                classes.
- 1        3. The method of claim 1 wherein the performing step includes the steps of:  
2                transmitting to the wireless data network a quality of service information element  
3                comprising at least two traffic class fields, one for an uplink direction and one for a  
4                downlink direction associated with the mobile station.
- 1        4. The method of claim 3 wherein the quality of service information element  
2                further comprises at least two residual bit error rate fields, one for the uplink and one for  
3                the downlink; at least two service data unit error ratio fields, one for the uplink and one  
4                for the downlink; and at least two transfer delay fields, one for the uplink and one for the  
5                downlink.
- 1        5. The method of claim 1 further comprising the steps of:  
2                receiving data in accordance with a first negotiated traffic class; and  
3                transmitting data in accordance with a second negotiated traffic class;  
4                wherein the first negotiated traffic class and the second negotiated traffic class are  
5                different.
- 1        6. A method for use in a first packet server of a wireless network, the method  
2                comprising the steps of:  
3                exchanging messages with a second packet server for the purpose of providing at  
4                least one service to a mobile station, wherein the exchanging step includes the step of

5 transmitting to the second packet server a message comprising a quality of  
6 service information element comprising a field for requesting asymmetric traffic  
7 classes for an uplink direction and a downlink direction associated with the mobile  
8 station.

1 7. The method of claim 6 wherein the quality of service information element  
2 further comprises at least two residual bit error rate fields, one for the uplink and one for  
3 the downlink; at least two service data unit error ratio fields, one for the uplink and one  
4 for the downlink; and at least two transfer delay fields, one for the uplink and one for the  
5 downlink.

1 8. A packet server comprising:

2 a transceiver for exchanging messages with a second packet server for the purpose  
3 of providing at least one service to a mobile station; and

4 a processor for causing to be transmitted to the second packet server a message  
5 comprising a quality of service information element comprising a field for requesting  
6 asymmetric traffic classes for an uplink direction and a downlink direction associated with  
7 the mobile station.

1 9. The wireless apparatus of claim 8 wherein the quality of service information  
2 element further comprises at least two residual bit error rate fields, one for the uplink and  
3 one for the downlink; at least two service data unit error ratio fields, one for the uplink  
4 and one for the downlink; and at least two transfer delay fields, one for the uplink and one  
5 for the downlink.

1 10. A transmission frame representing data embodied in a wireless transmission  
2 signal, the transmission frame comprising:

3 a field for requesting asymmetric traffic classes for an uplink direction and a  
4 downlink direction associated with a mobile station;  
5 a downlink traffic class field; and  
6 an uplink traffic class field.